BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT KAMAKSHAMMA LAYOUT EASTERN SIDE CROSS ROADS IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 40.00 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	**Removing B.S. slab** of Drain and stacking (P No.25 / I N 5.32)								
	Kamakshamma Layout (E/S)	Sqm							
	3rd Cross Road		2	72.00	0.75		108.00		
	1st Cross of 3rd Cross Road		2	57.00	0.60		68.40		
	2nd Cross of 3rd Cross Road		1	45.00	0.60		27.00		
	1st Cross Road (W/S)		1	22.00	0.75		16.50		
			1	56.00	0.75		42.00		
							261.90	65.72	17212.07
	Basic Rate	62.00							
	Area Weightage @ 6%	3.72							
	Total	**65.72**							
2	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (P.142/I.19.1)								
	Desilting for Drain	Cum							
	3rd Cross Road		2	72.00	0.60	0.50	43.20		
	1st Cross of 3rd Cross Road		2	57.00	0.60	0.50	34.20		
	2nd Cross of 3rd Cross Road		1	45.00	0.60	0.60	16.20		
	1st Cross Road (E/S)		1	22.00	0.60	0.60	7.92		
	1st Cross Road (W/S)		1	56.00	0.60	0.50	16.80		
							118.32	86.92	10284.37
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
3	KSRB 2-2.1 : **Earth work excavation** for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)								
	Kamakshamma Layout (E/S)	Cum							
	near Jnana bnharathi school		1	27.50	1.10	1.10	33.28		
			1	39.80	1.20	1.30	62.09		
	1st Cross Road (E/S)		1	21.20	1.00	1.00	21.20		
	Kondappa Lyt Main Road		1	126.00	1.10	1.20	166.32		
							282.88	200.34	56672.78

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	200.34							
4	KSRRB M200-24:- dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces no exceeding 0.02 Cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 meters, stacking serviceable and unserviceable materials separately complete as per specifications. MORTH specifications. No. 202. (P.No. 138/ Item No. 18.47)								
		Cum							
	3rd Cross Road		1	72.00	4.00	0.20	57.60		
	1st Cross of 3rd Cross Road		1	30.00	3.30	0.20	19.80		
	2nd Cross of 3rd Cross Road		1	64.00	3.30	0.20	42.24		
							119.64	827.86	**99045.17**
	Basic Rate	781.00							
	Area Weightage @ 6%	46.86							
	Total	**827.86**							
5	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for **levelling and lowering** the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
	for Road	Cum							
	3rd Cross Road		1	72.00	4.00	0.20	57.60		
	1st Cross of 3rd Cross Road		1	30.00	3.30	0.20	19.80		
	2nd Cross of 3rd Cross Road		1	64.00	3.30	0.20	42.24		
	MIGB Block No.5,6,7,8		1	13.95	24.95	0.25	87.01		
			1	6.00	4.00	0.25	6.00		
			1	7.00	2.00	0.25	3.50		
							216.15	166.42	**35972.20**
	Basic Rate	157.00							
	Area Weightage @ 6%	9.42							
	Total	**166.42**							
6	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.133/ Item No 17.1)								
		Cum							
			Qty Vide Item No.2+3+4+5				**737.00**	100.00	**73699.61**
	Average Weight of Earth 1.28 Tonne/Km								

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Total	**100.00**							
7	KSRB 5-11 : Providing and constructing load bearing wall with cement concrete cavities blocks (hollow blocks) of proportion 1:1.5:3 blocks of size **40x20x20cms.(lxbxh) strength not less than 3.5 Newton per sqmm** with cement mortar 1.4 conforming to I.S.2185 of 1967 having not less than 40mm.shell thickness with two or more large cavities and having solid material between including cost of materials, labour charges, scaffoldings, curing complete as per specifications. KBS No.5.4 (P.24 / I.N 5.25)								
	for Drain	Sqm							
	1st Cross Road (E/S)		2	22.00		0.20	8.80		
							8.80	974.14	**8572.00**
	Basic Rate	919.00							
	Area Weightage @ 6%	55.14							
	Total	**974.14**							
8	KSRB 15.1.1: Providing **flush pointing** to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.(Page No.113/Item No. 15.1)								
		Sqm							
			2	22.00		0.20	8.80		
							8.80	102.82	**905.00**
	Basic Rate	97.00							
	Area Weightage @ 6%	5.82							
	Total	**102.82**							
9	KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1.4.2.(P No. 13 / Item No.4.7)								
	for Drain coping	Cum							
			2	22.00	0.20	0.10	0.88		
							0.88	5598.92	**4927.00**
	Basic Rate	5282.00							
	Area Weightage @ 6%	316.92							
	Total	**5598.92**							
10	**Refixing stone slabs** of drains and pointing in C.M.(1:3)(P.No.25/I.No.5.33)								
		Sqm							
			90% of Qty Vide Item No.1				235.71	80.56	18988.80

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							
11	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.3)								
		Cum							
	near Jnana bnharathi school		1	27.50	1.10	0.15	4.54		
			1	39.80	1.20	0.15	7.16		
	1st Cross Road (E/S)		1	21.20	1.00	0.15	3.18		
	Kondappa Lyt Main Road		1	126.00	1.10	0.15	20.79		
	3rd Cross Road		1	72.00	4.00	0.15	43.20		
	1st Cross of 3rd Cross Road		1	30.00	3.30	0.15	14.85		
	2nd Cross of 3rd Cross Road		1	64.00	3.30	0.15	31.68		
							125.40	5159.02	**646948.85**
	Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
12	KSRB 4.9.2: Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **-do-TMT Bars Fe 500** P.17/It.No.4.46.2								
		tonne	No.of Bars	Width/Lengt	Rmtr	Kg/Rmtr	Total in Kg		
	12mm dia main bar spacing at 150mm c/c	1	183	2.10	385.00	0.888	341.88		
	10mm dia dist bar spacing at 150mm c/c	1	14	27.50	385.00	0.617	237.55		
	12mm dia main bar spacing at 150mm c/c	1	265	2.90	769.47	0.888	683.29		
	10mm dia dist bar spacing at 150mm c/c	1	19	39.80	756.20	0.617	466.58		
	12mm dia main bar spacing at 150mm c/c	1	141	1.95	275.60	0.888	244.73		
	10mm dia dist bar spacing at 150mm c/c	1	13	21.20	275.60	0.617	170.05		
	12mm dia main bar spacing at 150mm c/c	1	840	2.30	1932.00	0.888	1715.62		
	10mm dia dist bar spacing at 150mm c/c	1	14	126.00	1764.00	0.617	1088.39		
						in Kg	4948.07		
						in Qtl	49.4807		
						in tonne	**4.9481**	74915.50	**370687.05**
	Basic Rate	70675.00							
	Area Weightage @ 6%	4240.50							
	Total	**74915.50**							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
13	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.21 (P.15 / I.4.31)								
		Sqm							
	near Jnana bnharathi school		2x2	27.50		0.75	82.50		
			2x2	39.80		0.90	143.28		
	1st Cross Road (E/S)		2x2	21.20		0.60	50.88		
			2x2	126.00		0.75	378.00		
							654.66	310.58	**203324.30**
	Basic Rate	293.00							
	Area Weightage @ 6%	17.58							
	Total	**310.58**							
14	Providing & laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs , with 20mm and down size graded granite metal,coarseaggregated @ 0.69cum ,and fine aggregated @ 0.460cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed -2008 machine mixed concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings,pedestals,retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts,struts, buttresses, bed blocks, anchor blocks, plinths etc.,including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications.specifications No.KBS 4.1,4.6 (P.No.13/ I.No 4.11)								
		Cum							
	bed		1	27.50	1.00	0.15	4.13		
			1	39.80	1.20	0.15	7.16		
			1	21.20	1.00	0.15	3.18		
			1	126.00	1.00	0.15	18.90		
	Side wall		2	27.50	0.15	0.75	6.19		
			2	39.80	0.15	0.90	10.75		
			2	21.20	0.15	0.60	3.82		
			2	126.00	0.15	0.75	28.35		
							82.47	6371.66	**525461.24**
	Basic Rate	6011.00							
	Area Weightage @ 6%	360.66							
	Total	**6371.66**							
15	Providing and fixing **RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm** and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
		Sqm							
	for Drain covering slab		*10% of Qty Vide Item No.1*				**26.19**		
	near Jnana bnharathi school		1	27.50	0.90		24.75		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
			1	39.80	1.10		43.78		
	1st Cross Road (E/S)		1	21.20	0.75		15.90		
			1	126.00	0.90		113.40		
							224.02	2100.00	**470442.00**
	Data Rate **2100.00**								
16	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete **(RMC)** M20 for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, for raft foundation, column footing, main and secondary beams with all lead and lifts etc.,complete (exclusive of cost of steel and fabrication charges.) Page No.18 / Item No. 4.48)								
	for road	Cum							
	3rd Cross Road		1	72.00	4.00	0.125	36.00		
	1st Cross of 3rd Cross Road		1	30.00	3.30	0.125	12.38		
	2nd Cross of 3rd Cross Road		1	64.00	3.30	0.100	21.12		
							69.50	6231.74	**433074.77**
	Basic Rate	5879.00							
	Area Weightage @ 6%	352.74							
	Total	**6231.74**							
17	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.158 I.No.20.18)								
	5th Phase New town, yelahanka	Cum							
	MIGB Block No.5,6,7,8		1	13.95	24.95	0.15	52.21		
			1	6.00	4.00	0.15	3.60		
			1	7.00	2.00	0.15	2.10		
							57.91	1768.08	**102385.76**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
18	KSRB 14.6-2 : Providing and laying **heavy duty cobble stones 60 mm** thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. (P No. 101 / Item No. 14.6)								
		Sqm							
	MIGB Block No.5,6,7,8		1	13.95	24.95		348.05		
			1	6.00	4.00		24.00		
			1	7.00	2.00		14.00		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
							386.05	966.72	373204.67
	Basic Rate	912.00							
	Area Weightage @ 6%	54.72							
	Total	**966.72**							
19	**Vaccum De-watering** with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift (P.177/ I.22.7)								
	for road	Sqm							
	3rd Cross Road		1	72.00	4.00		288.00		
	1st Cross of 3rd Cross Road		1	30.00	3.30		99.00		
	2nd Cross of 3rd Cross Road		1	64.00	3.30		211.20		
							598.20	95.40	57068.28
	Basic Rate	90.00							
	Area Weightage @ 6%	5.40							
	Total	**95.40**							
20	Providing Groove cutting for width of 5mm to 10mm and depth 80mm-100mm including cost of cutting machine generator and HOM of machinery including cost of blade, coolant etc., including cleaning aof groove & providing sand and hot bitumen fillars and filler metal etc.,including cost of conveyance of all materials, labour,lead and lift charges and all the other incidental charges as per drawing and as per specifications, MORTH specification. (P.178/ I.22.8)								
	for road	m							
	3rd Cross Road		12	4.00			48.00		
	2nd Cross of 3rd Cross Road		5	3.30			16.50		
							64.50	121.90	7862.55
	Basic Rate	115.00							
	Area Weightage @ 6%	6.90							
	Total	**121.90**							
21	5.29(b)Providing and fixing **pre cast solid cement concrete kerb stones** made out of No.272.21 C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete (P.No.25 /It.No.5.30)								
		No							
			1	78.00		78.00 / 0.45	173.33		
			1	116.00		125.00 / 0.45	257.78		
							431.11		
						Say	**430.00**	331.78	142665.40
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							
	Total	**331.78**							

Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
KSRB 15-19.2 :Providing and applying **ready mix priming coat** over concrete/masonry/asbestos cement sheet/plastered surfaces including preparing the surface after throughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page no.121 / It no.15.80)								
	Sqm	1	78.00		0.40	31.20		
		1	245.00		0.40	98.00		
			116.00			98.00	27.56	2700.88
Basic Rate	26.00							
Area Weightage @ 6%	1.56							
Total	**27.56**							
KSRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No.182 & Item No.24.1)								
	Sqm							
			Qty Vide Item No.22			98.00	63.60	6232.80
Basic Rate	60.00							
Area Weightage @ 6%	3.60							
Total	**63.60**							
						Sub-Total Amount		3667442.00
9% for KRIDL Charges								330070.00
Miscellaneous and unforeseen charges	LS							2488.00
						Grand Total Amount		4000000.00

(Rupees Fourty Lakhs Only)

CERTIFICATE

The site has been inspected and the work is found to be necessary.
The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle.
The provisions were made in this estimate are necessary and adequate.
The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Ward No.02

Executive Engineer
Yelahanka Division
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

ADMINISTRATIVELY SANCTIONED FOR Rs 40.00 lacs
Rupees forty lacs only

Technical Sanction
Accorded For 40.00 lacs only
Head of A/C. P319.2
CER NO :215/16-17 Dt:31.03.2017

TA[illegible]CE (YNK)

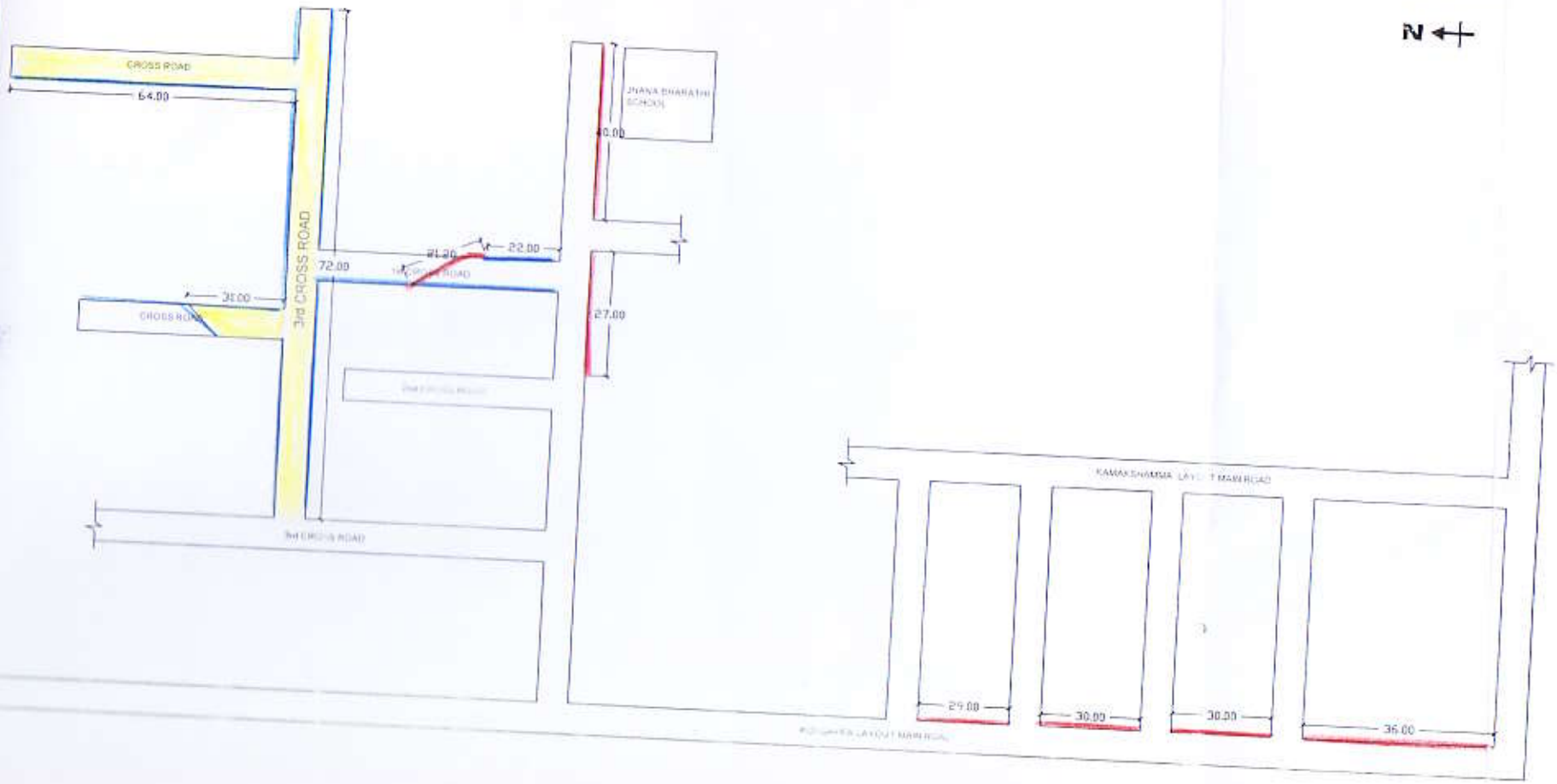
Under ...

Dt ... Sanctioned
JC(N) ea/AS/48/2017-18.
dated 18-3-2017

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT KAMAKSHAMMA LAYOUT EASTERN SIDE CROSS ROADS IN WARD NO.02 OF YELAHANKA SUB-DIVISION

KEY : NOT TO SCALE



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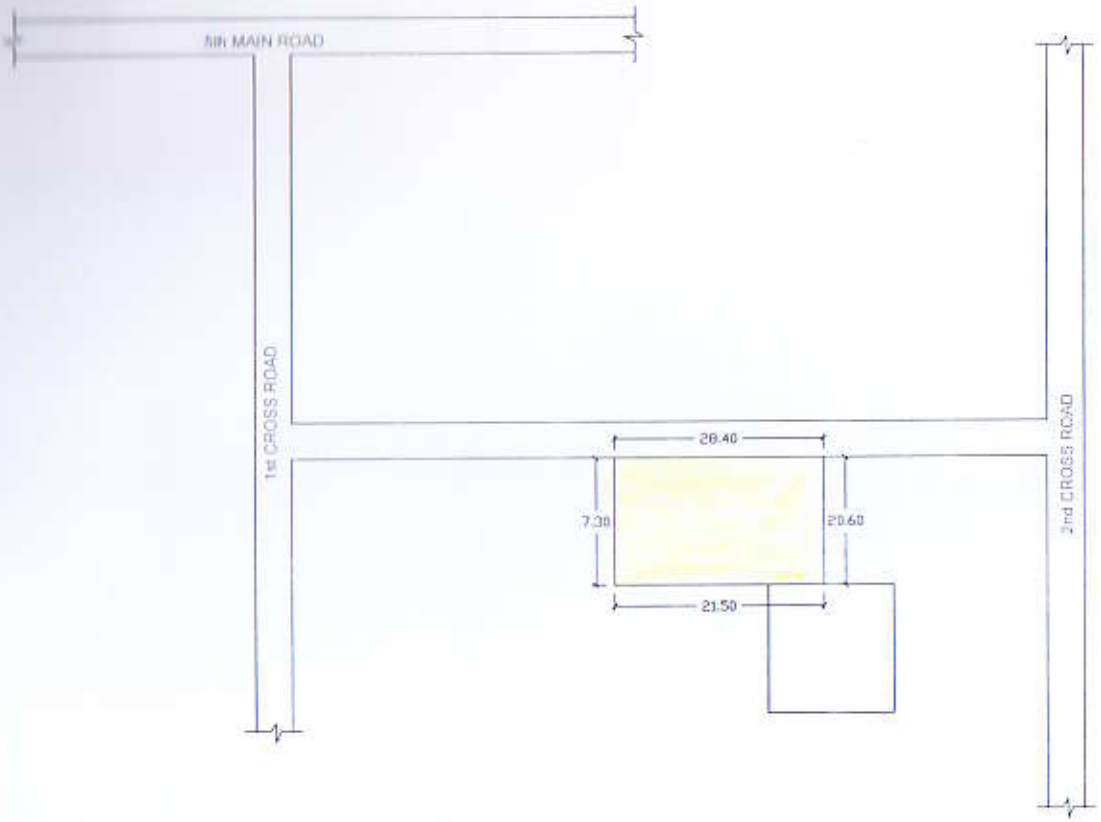
- CC ROAD
- CC DRAIN
- DRAIN IMPROVEMENTS

Assistant Engineer
Ward No 02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT KAMAKSHAMMA LAYOUT EASTERN SIDE CROSS ROADS IN WARD NO.02 OF YELAHANKA SUB-DIVISION



KEY : NOT TO SCALE

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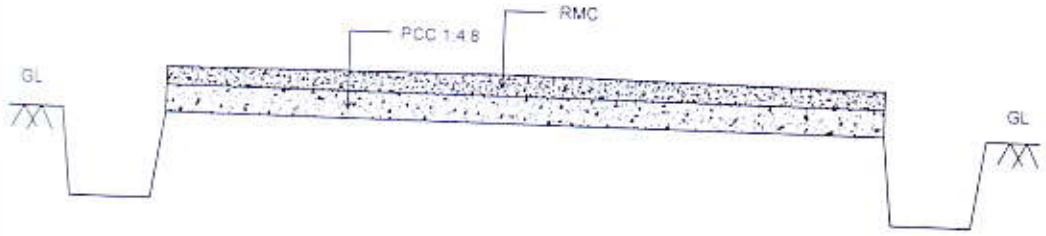
INDEX

- COBBLE STONES

Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT KAMAKSHAMMA LAYOUT EASTERN SIDE CROSS ROADS IN WARD NO.02 OF YELAHANKA SUB-DIVISION



TYPICAL CROSS SECTION OF CC ROAD

Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

YELAHANKA ZONE
WARD 2-CHOWDESHWARI WARD

Legend

Major Road

Intermediate Road

Minor Road